

## APPENDIX XXIV: REGION 9 REGIONAL CONTINGENCY PLAN

### ECOLOGICAL RISK ASSESSMENT (ERA)/NET ENVIRONMENTAL BENEFIT ANALYSIS (NEBA)

Since 1998, the U.S. Coast Guard (USCG) has been sponsoring efforts to develop a comparative risk methodology to evaluate oil spill response options in a training or planning environment. Interest in selecting response options based on a risk/benefit analysis goes back even further, but the current effort is different in that it emphasizes a consensus-building approach to evaluate risks and benefits. USCG Headquarters (G-MOR) has sponsored the development of a guidebook on this process. The document, entitled “Developing Consensus Ecological Risk Assessments: Environmental Protection in Oil Spill Response Planning. A Guidebook” is available from GMOR, or can be downloaded from the contractor’s web site at:

<http://www.ecosystem-management.net/assets/documents//CG%20ERA%20Guidebook.pdf>.

The process is designed to help planners compare the ecological consequences of response options, especially in near shore or estuarine situations. This is particularly important for consideration of dispersants and in-situ burning, which present difficult analytical issues. It is focused on ecological “trade offs” or cross-resource comparisons. Through a structured analytical approach the participants find “common ground” for evaluation of impacts and develop a defensible logic to support their conclusions. This process is consistent with the U.S. Environmental Protection Agency’s (EPA) Ecological Risk Assessment (ERA) guidelines (US EPA, 1998), but emphasizes development of group consensus among stakeholders. The process uses a series of analytical tools specifically developed for use in a group environment. It is designed to be a training and planning tool, and should not be used during an actual event. The knowledge gained by participants in the process, however, will facilitate realtime decision-making. The training usually involves two 2 or 3-day workshops lead by a facilitator. The ideal size is 25 to 30 participants, including spill response managers, natural resource managers and trustees, subject matter experts, and non-governmental organizations. The goal is to achieve consensus interpretations of the potential risks and benefits associated with selected response options based on a scenario developed by the local participants. The time between the two workshops is used for the participants to research issues of concern before they develop their final conclusions. The process is heavily focused on achieving a consensus interpretation of the available technical information. It is very important to have a broad representation of the potential stakeholders in the decision process; otherwise the results may not be accepted by all of the groups who will be concerned if a spill occurs. The workshop process includes three primary phases - **problem formulation, analysis, and risk characterization**. Details of the process are described in the Guidebook. In the first phase, **problem formulation**, participants in the Santa Barbara Region workshop developed a scenario for analysis, identified resources of concern along with associated assessment thresholds, and prepared a conceptual model to guide subsequent

analysis. In the **analytical phase**, participants characterized exposure and ecological effects. The conceptual model, developed in the problem formulation phase directed the analysis using standard templates and simple analytical tools that define and summarize the analysis for

each resource of concern and each response option.

Finally, the participants completed a **risk characterization**. During this phase, participants interpreted their results in terms of the costs and benefits of each response option to overall environmental protection as compared to natural recovery (i.e., baseline).

Two full ERAs have been completed in Region 9:

**San Francisco Bay – 2000 ERA can be downloaded from:**

<http://www.uscg.mil/d11/m/rrt9web/>

**Santa Barbara Channel – Spring 2002 ERA can be downloaded from:**

<http://www.uscg.mil/d11/m/rrt9web/>

**San Diego ERA is planned for Summer 2006.**